AEE Astbury Environmental Engineering, Inc.
A MEMBER OF THE ASTBURY GROUP

5933 WEST 71ST STREET ▪ INDIANAPOLIS, INDIANA 46278 ▪ 317-290-1471 ▪ FAX: 317-290-1670

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AIR ENFORCEMENT BRANCH,
U.S. EPA, REGION 5

U.S. EPA Region 5
AE-17J
77 West Jackson Boulevard
Chicago, IL 60604
Attn: Mr. George Czerniak

RE: Precompliance Plan
40 CFR 63 Subpart MMM
Railworks Wood Products, Inc.
Terre Haute, Indiana
AEE 229.01

Dear Mr. Czerniak:

Last year, it came to the attention of Astbury Environmental Engineering, Inc. (AEE) that the above mentioned facility is required to comply with 40 CFR 63, Subpart MMM, National Emission Standards for Hazardous Air Pollutants for Pesticide Active Ingredient Production. Railworks Wood Products, Inc. is engaged in, among other processes, blending of oils to produce creosote for wood preservation. This document will function as the Precompliance plan for the referenced Subpart for the facility.

Process Description

Creosote production at the facility is accomplished by blending of two heated hydrocarbon oils directly into a tanker truck. The hatch at the top of the tanker truck is allowed to remain open during blending to avoid excessive negative pressurization in the truck as the creosote cools. Emissions occur only by displacement of air in the truck and by movement of the heated gas to the cooler outside air (no forced air movement or air flow are present). Upon completion of the blending process, the creosote is trucked either to other locations on-site or to offsite customers.

Preliminary Emissions Testing

Upon determination of rule applicability to the facility, preliminary emission measurements were obtained by summa canister at the facility on January 29, 2002 during a production run. Results of the summa canister analysis indicate that the concentration of HAPs in the emission stream is likely to be in the parts per billion range by volume. §63.1361 states, in part:

> "*Process vent* means a point of emission from processing equipment to the atmosphere or a control device.[...] A vent is not considered to be a process vent for a given emission episode if the undiluted and uncontrolled emission stream that is released through the vent contains less than 20 ppmv HAP, as determined through process knowledge that no HAP are present in the emission stream; using an engineering assessment as discussed in §63.1365(b)(2) [*sic*] (ii); from test data collected using Method 1818 [*sic*] of 40 CFR part 60, appendix A; or from test data collected using any other test method that has been validated according to the procedures in Method 301 of appendix A of this part."

From the preliminary emission data, it appears that the tanker truck is likely to fall outside the definition of a process vent by producing less than 20 ppmv of HAPs. Because no other PAI process vents exist at the facility, it would then be exempt from the requirements of 40 CFR 63, Subpart MMM. However, also by the definition, it will be necessary to verify the summa canister results through an engineering assessment, testing by Method 18 of 40 CFR 60 Appendix A, or by testing via an alternative approved method.

The low expected HAP concentration in the emission stream presents some difficulties with traditional application of Method 18. Method 18 requires concurrent use of an unspiked sampling train with a sampling train spiked at 40-60% of the expected HAP concentrations. AEE has been advised by an accredited testing laboratory that it will not be technically feasible to spike in the parts per billion range, as would be required based on preliminary results. In addition, three replicate samples are required at a duration of at least one hour each. The batch creosote manufacturing process is typically completed in approximately 45 minutes, meaning that testing during different manufacturing events, possibly under different ambient conditions, would be required to obtain the three samples. A relatively high flow rate would also be required over the 45-minute period to obtain an adequate sample.

Therefore, AEE wishes to propose an alternate sampling protocol based on Method 25A of 40 CFR 60 Appendix A. This method employs field instrumentation to obtain a total VOC level in the emissions stream. Since the definition of a process vent under §63.1361 is concerned with the concentration of HAPs in the emission stream, measurement of total VOCs would provide a conservative estimate of the HAP concentration.

Other Precompliance Plan Considerations

Because none of the units at the facility are expected to be covered by Subpart MMM, monitoring, installation of control devices and a pollution prevention demonstration summary are not expected to be required. Because an Appendix A test method has been chosen as the basis for applicability determination, an engineering assessment is not expected to be performed.

Thank you for your assistance in this matter. Should you have any questions or concerns, please feel free to contact this office at your convenience.

Sincerely,
ASTBURY ENVIRONMENTAL ENGINEERING

Jennifer R. Fanson

Jennifer Fanson
Project Manager

Mack Overton

Willis M. Overton, CHMM
Vice President, Industrial Services

JRF/WMO:jrf
Enclosures
Cc: Mr. Sam Sutopo, Railworks Wood Products

APPENDIX A

Laboratory Results

ENTHALPY ANALYTICAL, INC.

Client Name:	Astbury Environmental Engineers	Enthalpy Project #:	0102-63
Data File:	T020075.d	Analysis Date:	2/1/02
Customer ID:	R1 Creosote Tank Car, 250mL	Analysis Dilution Factor:	2.00
Tank ID:	1039	Tank Dilution Factor:	1.51
Report Date:	2/7/02		

Detected TICs:

Compound	Retention Time	Area	Amount As Analyzed (ppbv)	Amount As Sampled (ppbv)
Propadiene	3.61	1,167,687	1.98	2.98
Isobutane	3.78	502,775	0.853	1.28
Methylpropene isomer	3.97	565,190	0.959	1.44
Butane	4.03	614,146	1.04	1.57
Unknown C5 hydrocarbon	4.92	2,154,904	3.66	5.50
Pentane	5.38	759,337	1.29	1.94
Acetone	5.59	852,696	1.45	2.18
Methylene chloride	5.81	1,922,450	3.26	4.91
Carbon disulfide	6.02	513,828	0.872	1.31
Unknown C6 hydrocarbon	6.91	2,220,403	3.77	5.67
Methylpentane isomer	7.01	4,870,093	8.26	12.4
Methylpentane isomer	7.40	2,892,693	4.91	7.39
Hexane	7.89	809,619	1.37	2.07
Dimethylbutene isomer	8.11	527,147	0.894	1.35
Dimethylpentane isomer	8.76	807,106	1.37	2.06
Benzene	9.45	349,938	0.594	0.894
Methylhexane isomer	9.90	473,084	0.803	1.21
Dimethylpentane isomer	9.97	336,007	0.570	0.858
Methylhexane isomer	10.19	378,400	0.642	0.966
Xylene isomer	14.95	607,825	1.03	1.55
Trimethylbenzene isomer	16.03	550,336	0.934	1.41
Unknown hydrocarbon	17.78	711,473	1.21	1.82
Unknown hydrocarbon	18.07	1,579,246	2.68	4.03
Undecane	18.87	418,465	0.710	1.07
Naphthalene	20.53	7,980,930	13.5	20.4

Internal Standard	Retention Time	Area	Amount (ppbv)
Toluene-d8 (IS)	12.43	27,115,054	23.0

*Compounds Coelute